

Working in Forschungszentrum Jülich

Jülich Supercomputing Center (JSC)

Sandra Diaz-Pier, December 7th, 2016

About me



My background

Sandra Diaz Pier

Mexican

My education

BsCEng Electronic Systems Engineering

Masters Computer Science

Masters Electrical Engineering

My work

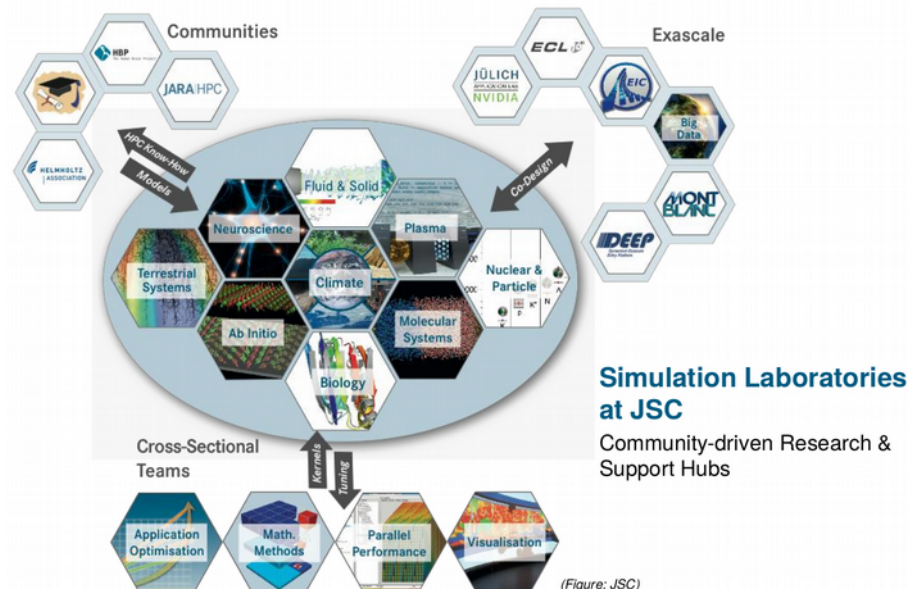
Computational Neuroscience



Jülich Supercomputing Center SimLab Neuroscience

Support for neuroscientists using the supercomputers

- Support for neuroscientists porting code to supercomputers
- Help formulate and justify applications for computation time
- Courses to aid the neuroscience community optimize their usage of the computational infrastructure



(Figure: JSC)

Jülich Supercomputing Center SimLab Neuroscience

Research on Neuroscience problems

- Simulation
- Modeling

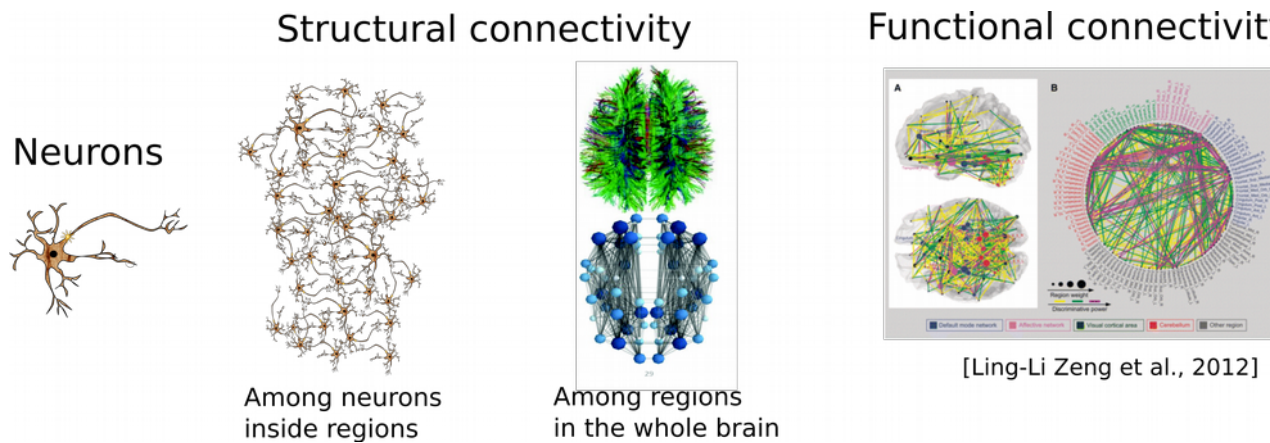


Structure

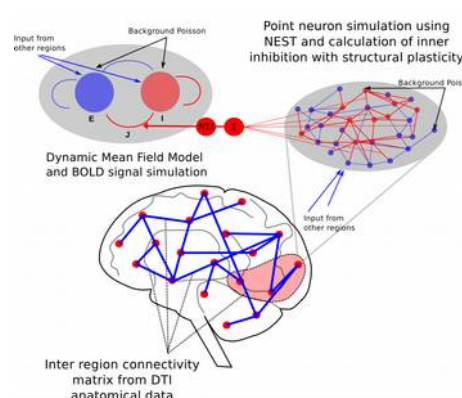
- Interdisciplinary team
 - Master students, PhD students, Post Docs, PIs.
 - Software Development and Engineering, Electrical Engineering, Neuroscience, Neuroinformatics, Artificial Intelligence, Molecular Physics
- Organizational structure: Dr. Prof. Thomas Lippert, Dr. Boris Orth and Dr. Prof. Abigail Morrison

Research topics

- Relationships between structural and functional connectivity in the brain



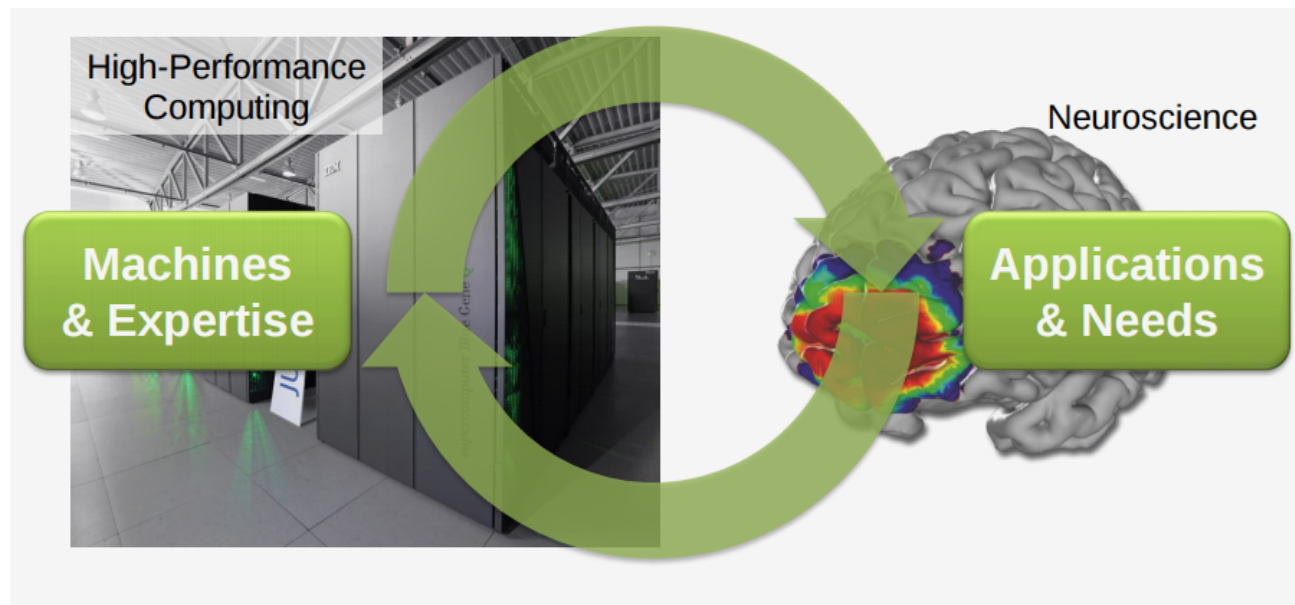
- Modeling and simulation of neural networks at multiple scales
- Structural plasticity



What do I value about my work in Jülich?

Opportunity to do the work I always wanted to do

- Work with state of the art computational systems
- Link computation with neuroscience
- Innovation, creativity and research
- Opportunity to do a PhD



What do I value about my work in Jülich?

The possibility to have a good balance between family and work

- Flexible hours and place of work (work from home)
- Room for parents and children
- Understanding by management



What do I value about my work in Jülich?

Carrier development

- Opportunities to continue on the research path
- Training programs on state of the art topics
- Opportunity to meet and work together with excellent scientists around the world



What do I value about my work in Jülich?

Campus and infrastructure

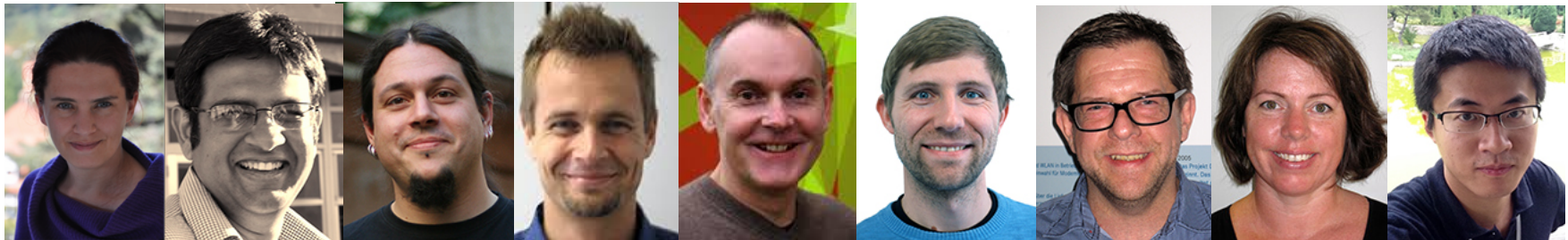
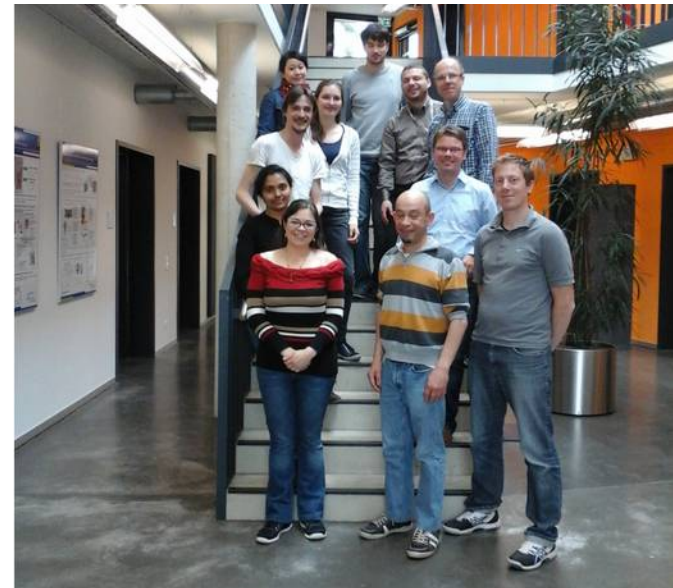
- Great computational infrastructure
- A beautiful campus
- Ever growing and improving research community



What do I value about my work in Jülich?

The people

- Colleagues from different cultures and backgrounds
- Professionalism
- Amazing working environment
- Support, respect, cooperation, motivation and understanding



Thank you for your attention

Questions?